



Practitioner's Docket No. MSU 4.1-568

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Thomas J. Pinnavaia, Wenzhong Zhang and Yi Liu

Application No.: 10/025,647 Group No.: 1755
Filed: December 19, 2001 Examiner: David R. Sample
For: ULTRASTABLE POROUS ALUMINOSILICATE STRUCTURES AND COMPOSITIONS
DERIVED THEREFROM

*Patent No.: Issue Date:
Reexamination No.:

*NOTE: Preferably also insert inventor's name and invention title.

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TERMINAL DISCLAIMER TO OBLIGATE
A DOUBLE PATENTING REJECTION (37 C.F.R. § 1.321(c))

Identification of Person(s) Making This Disclaimer

I, Paul M. Hunt

(type or print names of all inventors or assigns or name of attorney signing disclaimer)

(a) represent that I am

- an inventor (applicant) of this invention.
 an assignee of this invention.

CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10*

(When using Express Mail, the Express Mail label number is mandatory;
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I hereby certify that, on the date shown below, this correspondence is being:

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37 C.F.R. § 1.8(a)

37 C.F.R. § 1.10 *

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Signature

Jessica R. House

(type or print name of person certifying)

Date: 01/29/2004

* Only the date of filing (§ 1.6) will be the date used in a patent term adjustment calculation, although the date on any certificate of mailing or transmission under § 1.8 continues to be taken into account in determining timeliness. See § 1.703(f). Consider "Express Mail Post Office to Addressee" (§ 1.10) or facsimile transmission (§ 1.6(d)) for the reply to be accorded the earliest possible filing date for patent term adjustment calculations.

(Terminal Disclaimer to Obviate a Double Patenting Rejection [9-4]—page 1 of 5)

02/06/2004 MDAHTE1 00000097 10025647

55.00 DP

03 FC:2814

WARNING: "If the patent or patent application is assigned to an organization, such as a corporation, partnership, university, [g]overnment agency or similar entity, and the disclaimer is signed by the assignee, the assignee must comply with § 3.73(b)." Notice of Oct. 15, 1993, 1156 O.G. 54-61 at 56, § 1490, M.P.E.P., 7th Edition.

- a representative authorized to sign on behalf of the assignee identified below.
- A statement under 37 C.F.R. § 3.73(b) is attached.

WARNING: See the above "WARNING."

- the attorney of record for this invention.

NOTE: The rules "permit an attorney or agent of record to sign a terminal disclaimer without the need to comply with § 3.73(b)." Notice of Oct. 15, 1993, 1156 O.G. 54-61, at 56. See also § 1490, M.P.E.P., 7th Edition.

IDENTITY OF ASSIGNEE AND TITLE OF DISCLAIMANT (if applicable)

The assignee is

Name of assignee Board of Trustees operating Michigan State University
Address of assignee 238 Administration Building
East Lansing, Michigan 48824

Title of disclaimant authorized to sign on behalf of assignee Associate Vice President for Research and Graduate Studies

EXTENT OF DISCLAIMER'S INTEREST

The extent of the interest in this invention that the disclaimant owns is:

- the whole of this invention.
- a sectional interest in this invention, as follows:

NOTE: Disclaimers from the whole interest must be filed.

(state the exact interest of the disclaimant)

The disclaimant(s) is/are:

- the applicant(s)
- the assignee(s)

RECORDAL OF ASSIGNMENT IN PTO
(if applicable)

- The assignment was recorded on 02/11/2002
Reel 012604
Frame 0580
- Authorization for recordal of the assignment is separately attached.
 A separate "ASSIGNMENT (DOCUMENT) COVER SHEET" or
 FORM PTO 1595 is also attached.

ESTABLISHING RIGHT OF ASSIGNEE TO TAKE ACTION
(if applicable)

- Attached is a STATEMENT UNDER 37 C.F.R. § 3.73(b) establishing the right of the assignee to take action in this case.

NOTE: Insert the appropriate page 3.

(Terminal Disclaimer to Obviate a Double Patenting Rejection—(Provisional Obviousness-Type Double Patenting Rejection Over A Pending Application) [9-4]— page 3 of 5)

DISCLAIMER

(Obviou s-Typ Double Patenting Rejection Over A Prior Patent)

Petitioner(s) hereby disclaims, except as provided below, the terminal part of any patent granted on the instant application, which would extend beyond the expiration date of Patent No. 6,585,952 B1 as presently shortened by any terminal disclaimer. Petitioner(s) hereby agree(s) that any patent so granted on the instant application shall be enforceable only for and during such period that it and the above-listed patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors, or assigns.

In making the above disclaimer, disclaimant does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. §§ 154 to 156 and 173 of the patent forming the basis of the double patenting rejection, namely, Patent No.: 6,585,952 B1, as presently shortened by any terminal disclaimer, in the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 C.F.R. § 1.321, has all claims cancelled by a reexamination certificate, is reissued, or is in any manner terminated prior to expiration of its full statutory term as presently shortened by any terminal disclaimer, except for the separation of legal title stated above.

DISCLAIMER FEE (37 C.F.R. § 1.20(d))

- Other than a small entity — fee \$110.00
- Small entity — fee \$55.00
 - Small entity statement attached
 - Small entity statement already filed
 - in patent application 10 / 025,647
on 12/19/2001 (Date)

FEE PAYMENT

- Fee already paid.
- Attached is a check money order in the amount of \$ 55
- Authorization is hereby made to charge the amount of \$ _____
 to Deposit Account No. _____
- to Credit card as shown on the attached credit card information authorization form PTO-2038.

WARNING: Credit card information should not be included on this form as it may become public.

- Charge any additional fees required by this paper or credit any overpayment in the manner authorized above. to Deposit Account 13-0610

A duplicate of this paper is attached.



Signature of disclaimant

Date:

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(b)Thomas J. Pinnavaia, Wenzhong Zhang and
Applicant/Patent Owner: Yi LiuFEB 02 2004
PATENT & TRADEMARK OFFICEApplication No./Patent N : 10/025,647 Filed/Issue Dat : December 19, 2001ULTRASTABLE POROUS ALUMINOSILICATE STRUCTURES AND
Entitled: COMPOSITIONS DERIVED THEREFROMBoard of Trustees operating
Michigan State University,^a University

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or2. an assignee of less than the entire right, title and interest.

The extent (by percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

A. An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel 012604, Frame 0580, or for which a copy thereof is attached.**OR**B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached.3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at
Reel _____, Frame _____, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

January 22, 2004
Date
(517) 355-2186

Telephone number

Paul M. Hunt

Typed or printed name

Paneravapunt

Signature

Associate Vice President For
Research and Graduate Studies

Title

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

(Statement under 37 C.F.R. 3.73(b) (PTO/SB/96) [16-16.1]—page 1 of 1)



UNITED STATES
PATENT AND
TRADEMARK OFFICE



41-568

APRIL 22, 2002

MCLEOD & MOYNE, P.C.
IAN C. MCLEOD
2190 COMMONS PARKWAY
OKEMOS MI 48864

Chief Financial Officer and Chief Administrative Officer
Washington, DC 20231
www.uspto.gov

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APR 26 2002

IAN C. McLEOD



101994919A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/11/2002

REEL/FRAME: 012604/0580

NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:
PINNAVAIA, THOMAS J.

DOC DATE: 12/18/2001

ASSIGNOR:
ZHANG, WENZHONG

DOC DATE: 01/02/2002

ASSIGNOR:
LIU, YU

DOC DATE: 12/18/2001

ASSIGNEE:
BOARD OF TRUSTEES OPERATING
MICHIGAN STATE UNIVERSITY
238 ADMINISTRATION BLDG.
EAST LANSING, MICHIGAN 48824

SERIAL NUMBER: 10025647
PATENT NUMBER:

FILING DATE: 12/19/2001
ISSUE DATE:

SHAREILL COLES, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

FORM PTO-1595
(Rev. 6-93)

OMB No. 0651-0011 (exp. 4/94)

RECOF

02-27-2002

ET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

Tab settings □ □ □ □ □

101994919

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Thomas J. Pinnavaia,
Wenzhong Zhang,
Yu LiuAdditional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Assignment | <input type="checkbox"/> Merger |
| <input type="checkbox"/> Security Agreement | <input type="checkbox"/> Change of Name |
| <input type="checkbox"/> Other _____ | |

Execution Date: T.J. Pinnavaia and Yu Liu
12/18/01; W. Zhang 1/02/02

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

10/025,647

B. Patent No.(s)

FEB 11 2002

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Ian C. McLeodInternal Address: McLeod & Moyne, P.C.Street Address: 2190 Commons ParkwayCity: Okemos State: MI ZIP: 488646. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41).....\$ 40 Enclosed Authorized to be charged to deposit account

8. Deposit account number:

(Attach duplicate copy of this page if paying by deposit account)

02/26/2002 TDIAZI 00000195 10025647

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40.00 00

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Ian C. McLeod
Name of Person Signing

Signature

1/17/2002

Date

5

Total number of pages including cover sheet, attachments, and document:

Mail documents to be recorded with required coversheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

ASSIGNMENT

WHEREAS, We, Thomas J. Pinnavaia, Wenzhong Zhang and Yu Liu, residing at 5901 Sleepy Hollow, East Lansing, Michigan 48823; 1124 S. Tamarack Avenue, Broken Arrow, Oklahoma 74012; and 1644 F Spartan Village, East Lansing, Michigan 48823, respectively, have invented certain new and useful improvements in ULTRASTABLE POROUS ALUMINOSILICATE STRUCTURES AND COMPOSITIONS DERIVED THEREFROM for which an application for United States Letters Patent was filed on December 19, 2001 and assigned Serial No. 10/025,647; and

WHEREAS, Board of Trustees, a constitutional Corporation operating Michigan State University, (hereinafter referred to as Assignee) of East Lansing, State of Michigan is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to us in hand paid, the receipt whereof is hereby acknowledged, and other valuable considerations, We the said Thomas J. Pinnavaia, Wenzhong Zhang and Yu Liu, have sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations and extensions thereof.

We hereby authorize and request the Patent and Trademark Office officials in the United States and any and all foreign countries to issue any and all of said

Letters Patent, when granted to said Assignee as the assignee of our entire right, title and interest in and to the same for the sole use and behoof of the said Assignee, its successors and assigns.

FURTHER, We agree that we will communicate to said Assignee or its representatives any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said Assignee, make all rightful oaths and generally do everything possible to aid said Assignee, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and in any and all foreign countries.

IN TESTIMONY WHEREOF, I have hereunto set my hand this 18th day of December, 2001.

Signed in the Presence of:

David L

Thomas J. Pinavaia
Thomas J. Pinavaia

STATE OF MICHIGAN :

ss.

COUNTY OF INGHAM :

On this 18th day of December, 2001, personally appeared before me the above Thomas J. Pinavaia, to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged the same to be his free act and deed in and for the purposes set forth in said instrument.

SEAL

Eileen J. McLeod
Notary Public

My Commission Expires: _____ EILEEN J. MCLEOD
Notary Public - Ingham County, MI
My Commission Expires April 30, 2004

IN TESTIMONY WHEREOF, I have hereunto set my hand this 2 day of Jan., 2001.

Signed in the Presence of:

Wenzhong Zhang
Wenzhong Zhang

STATE OF OKLAHOMA :

ss.

COUNTY OF TULSA :

On this 2 day of JAN, 2001,² personally appeared before me the above Wenzhong Zhang, to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged the same to be his free act and deed in and for the purposes set forth in said instrument.

SEAL

Lael A. Conover Beck
Notary Public
My Commission Expires: 11-4-03

IN TESTIMONY WHEREOF, I have hereunto set my hand this 18 day of Dec., 2001.

Signed in the Presence of:

Dave Sh Yu Liu

Yu Liu

STATE OF MICHIGAN :
ss.
COUNTY OF INGHAM :

On this 18th day of December, 2001, personally appeared before me the above named Yu Liu to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged the same to be her free act and deed in and for the purposes set forth in said instrument.

SEAL

Eileen J. McLeod
Notary Public

My Commission Expires: _____
EILEEN J. MCLEOD
Notary Public - Ingham County, MI
My Commission Expires April 30, 2004